

Interim Approval for Brands of Chemical Adhesives for use in Caltrans Contracts

Chemical adhesives (CA) intended for structural applications, such as for bonding threaded rods and/or rebars into horizontal holes drilled in hardened concrete, are required to comply with ICBO-AC58 (revised January 2001) in addition to Caltrans augmentation requirements. The use of CA in overhead holes is not recommended.

Until further notice, continued use of brands of CA and the corresponding anchors as listed in the table below is permitted, provided that the site and temperature conditions are suitable, and that the general use of this material is deemed appropriate by the Engineer. Installation shall be in accordance with the Caltrans Standard Special Provisions titled "Drill and Bond Dowel (Chemical adhesive)". The presence of a product on this list does not relieve it from meeting the requirements of Section 6, "Control of Materials", in the Standard Specifications.

Manufacturer or Brand Name	Product Name	Threaded Rod			Reinforcing Bar (Gr. 60)	Concrete temp. at time of installation		Installation time at 25 °C ^a	
		ASTM A 307	ASTM A 449 (T1)	F 593		Min (°C)	Max (°C)	Set (hrs)	Cure (hrs)
Covert Operations (800) 827-7229	"CIA Gel 7000"	No	Yes	No	Yes	4	43	4.0	36.0
Hilti (415) 507-1690	"HSE 2421"	Yes	Yes	Yes	Yes	2	43	0.25	24.0
Unitex (816) 231-7700	"Pro-Poxy 300 Fast" ^b	No	Yes	No	No	5	43	2.5	24.0
US Mix (303) 778 - 7227	US SPEC Gelbond NS Fast" ^b	No	Yes	No	No	5	43	2.5	24.0
ITW Ramset/ Redhead (800) 368 – 9724	"Acrylic 7"	No	Yes	No	Yes	-18	43	0.1	0.5
Powers Fasteners (510) 293 –1500 (800) 659-1069	"Power-Fast Standard Set epoxy" ^b	No	Yes	No	Yes	5	43	6.0	24.0
Simpson Strong Tie (510) 460 – 9912	"SET22" & "SET56"	No	Yes	No	Yes	5	43	1.0	24.0
US Anchor Corp./ Adhesive Tech Corp. (800) 262 – 4748	"Anchor-it HS200"	Yes	Yes	Yes	Yes	2	43	0.25	24.0
Hilti (415) 507-1690	RE500	Yes	Yes	Yes	Yes	-5	43	2.0	12.0

Foot notes a: The installation times are based on information in the Manufacturer's product literature. Set time is the minimum time needed for the adhesive to harden and support the anchor; cure time is the minimum time required before the anchor may be loaded.

b: A 30-element mixing nozzle shall be used to place the chemical adhesive.

General Notes: The conditionally approved adhesives on this interim list shall not be used in the following situations:

1. If there is a likelihood of fire.
2. For coated bars or rods, unless embedment length is increased by 50%, or an equivalent adjustment is made.